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Attorney's Docket: 1999DE132
Serial No.: 09/722,760
Group: 1756

REMARKS

The Office Action mailed July 3, 2003, has been carefully considered together with each of the references cited therein. The amendments and remarks presented herein are believed to be fully responsive to the Office Action. The amendments made herein are fully supported by the Application as originally filed. No new matter has been added. Accordingly, reconsideration of the present Application in view of the above amendments and following remarks is respectfully requested.

CLAIM STATUS

Claims 1, and 4-22 are pending in this Application. In Paragraphs 3 and 4 of the Office Action, the Office states that claims 1, 4-18, 20 and 21 are withdrawn from consideration as Applicants' previous amendment, reciting a structured silicate "in which the cation is a low molecular weight organic cation," places the elected species of distearyltrimethyl ammonium bentonite outside the scope of the subject claims. By this Amendment, the independent claims have been amended to recite "a structured silicate salt which contains a low molecular weight organic cation". It is, therefore, respectfully contended that the claims withdrawn by the Examiner should be reintroduced and examined as they are within the bounds of the elected species. Thus, it is believed that claims 1 and 4-22 are pending in this Application.

Objection to the Disclosure

The Disclosure stands objected to because of the typographical error "[⁺]" appearing in the chemical moiety "-SO₃[⁺]" disclosed at line 2 of the replacement paragraph beginning at page 13, line 11 of the specification, filed in Paper No. 10. Applicants have amended the subject paragraph, eliminating the typographical error.

Attorney's Docket: 1999DE132
Serial No.: 09/722,760
Group: 1756

Claim Rejections Under 35 USC § 112, Second Paragraph

Claim 22 stands rejected under 35 USC § 112, second paragraph, as being indefinite; lacking antecedent basis for the phrase "a powder coating". Claim 22 has been amended, eliminating the phrase "a powder coating". It is, therefore, respectfully contended that the 35 USC § 112, second paragraph, rejection has been overcome.

Claim Rejection Under 35 USC § 102(b)

Claim 22 stands rejected under 35 USC § 102(b) as being anticipated by US 5,807,629 (Elspass) as evidenced by US 5,385,776 (Maxfield). This rejection has been overcome. The Office states:

Note that this rejection was previously presented in the first Office Action on the merits mailed on May 1, 2002, Paper No. 7, paragraph 11, applied to originally filed claims 1-6, 9, 10 and 14, and was withdrawn in the Office Action mailed Nov. 22, 2002, Paper No. 9, paragraph 4. The addition of claim 22 filed in Paper No. 10 reinstated the rejection.

Applicants have amended claim 22 by eliminating the phrase "or of a powder coating".

As stated by the Office in the Office Action mailed November 22, 2002, the rejection over Elspass and Maxfield had been withdrawn in response to the amendment to claim, deleting the Markush member "of a powder coating". In consequence, it is believed that the § 102(b) rejection of claim 22 has been overcome.

Claim Rejections Under 35 USC § 103

Claims 19 and 22 stand rejected under 35 USC § 103(a) as being unpatentable over Japanese Patent 8-6295 (JP'295) combined with US 3,925,278

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Attorney's Docket: 1999DE132
Serial No.: 09/722,760
Group: 1756

(Murai), US 4,992,262 (Nakagaki), and Maxfield. This rejection is respectfully traversed.

The Office takes the position that JP'295 discloses a charge control agent comprising a composition that comprises the quaternary ammonium salt compound (1) of Table 1 of JP'295 and organic bentonite in a weight ratio of 50:50. The Office employs the secondary references of Murai, Nakagaki and Maxfield to identify a relationship between "organic bentonite" and bentonite.

As stated in Paragraph [0016] of JP'295 :

The quaternary ammonium salt as a charge control agent which can be used for the charge control agent constituent of this invention has desirable quaternary ammonium salt which has a polyacid anion or an organic sulfonic-acid anion as an anion component. (emphasis added)

The Office makes reference to formula 1 on page 6 of JP'295 as evidence of a quaternary ammonium salt compound. A close examination of formula 1, however, reveals that the anion is $1/4 [\text{MO}_8\text{O}_{26}]^{4-}$.

JP'295 discloses the use of bentonite as an extender. See Paragraph [0028]. Also as noted by the Office, Paragraph [0052] establishes a 50:50 weight ratio of the quaternary ammonium salt to the bentonite. Thus, JP'295 discloses a composition wherein a quaternary ammonium cation having a polyacid anion or an organic sulfonic-acid anion as is mixed with bentonite.

This is not what Applicants' claim as the silicate in Applicants' invention is the anion. There is no disclosure, teaching, or suggestion that the distearyldimethyl ammonium bentonite as claimed by Applicants' is capable of acting as a charge control agent. JP'295 actually teaches away from Applicants' invention as it expressly states in Paragraph [0025] and [0026]:

The anion component in the quaternary ammonium salt of this invention has a polyacid anion or an organic desirable sulfonic-acid anion. As a polyacid anion, both an isopolyacid anion which has

Attorney's Docket: 1999DE132
Serial No.: 09/722,760
Group: 1756

molybdenum and a tungsten, for example as a neutral atom, and a heteropolyacid anion can be used.
As an organic sulfonic-acid anion, all of organic sulfonic-acid anions, such as an aliphatic sulfonic-acid anion, an aromatic sulfonic-acid anion, and an aroma aliphatic sulfonic-acid anion, can be used.

There is no disclosure, teaching, or suggestion within JP'295 that bentonite can be used as the cation for distearyldimethyl ammonium.

A *prima facie* case of obviousness requires the prior art to provide motivation for one with ordinary skill in art to make the modification necessary to arrive at an applicant's invention as claimed. Here, such motivation is absent. The secondary references employed by the Office to draw a relationship between "organic bentonite" and a "bentonite impregnated with a cationic organic compound" provide no teaching, suggestion, or disclosure which would lead one with ordinary skill in the art to the conclusion that a distearyldimethyl ammonium bentonite can be used as a charge control agent.

Assuming, *arguedo*, that one with ordinary skill in the art combined the references in the manner proposed by the Office, the resultant combination would still fail to yield Applicants' invention. Specifically, substitution of any of the bentonites disclosed by the secondary references in the JP'295 reference would still yield a composition where a quaternary ammonium salt with a polyacid anion or organic sulfonic acid anion is used as a charge control agent with the bentonite employed as an extender. For at least this reason, it is respectfully submitted that Applicants' invention, as defined by claims 19 and 22, is not made obvious by any combination of JP'295 combined with 3,925,278 (Murai) US 4,992,262 (Nakagaki), and Maxfield. In consequence, Applicants courteously request reconsideration and withdrawal of the § 103 rejection.


As the total number of claims does not exceed the number of claims originally paid for, no fee is believed due. However if an additional fee is required, the

Attorney's Docket: 1999DE132
Serial No.: 09/722,760
Group: 1756

Commissioner is hereby authorized to credit any overpayment or charge any fee deficiency to Deposit Account No. 03-2060.

In view of the forgoing amendments and remarks, the present application is believed to be in condition for allowance, and reconsideration of it is requested. If the Examiner disagrees, she is requested to contact the attorney for Applicants at the telephone number provided below.

Respectfully submitted,


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